EGREMONT GREEN COMMITTEE MEETING MINUTES July 30, 2019

The meeting opened at 4:07. Present were Marj Wexler (Chair), Emily Eyre, Pat Konecky, Corinna Barnard.

Also present: Hinda Bodinger, Brian McGowan. Minutes of the 06/04/19 meeting were approved.

The meeting consisted of two presentations: Brian McGowan on building an energy-efficient house, Hinda Bodinger on the possibility of launching a town-wide awareness initiative on lowering personal consumption of plastic.

Brian McGowan/Building an energy efficient house: He and his wife were looking for a small house but few were available so they decided to build one. Now they have a 1600-square-feet, two-bedroom, one-floor house seated on a concrete slab (no basement.) The house has solar panels and is heated entirely by the electricity they produce. Their total energy bill last year was \$200. Brian estimates that due to the high cost of labor in the Berkshires, the cost of building their house is comparable to building a conventional (less efficient) house. He found that information on building with an eye to energy-efficient materials was scattered and confusing and thinks it would helpful if the state would issue a guide. They wound up using Unity Buildings, a company in New Hampshire that has customarily specialized in energy-efficient higher-end, larger houses built in the post-and-beam style. The company is branching into more affordable housing. It provided them with a "panel-built" house that employs many European, and particularly German, design features and construction practices. The project took about a year. An issue in this kind of project is finding a contractor. Not all are willing to work on a project that, due to the pre-assembled nature of the wall panels, requires so little work in the field.

The first step, he said, is thinking about siting the house to maximize sunlight, but also balance the hot-cold issues of summer and winter. Too many windows on the east side, for instance, can make the house too hot in summer. Deciduous trees and blinds can help. A low hanging porch will also block sun in summer, but allow it to enter in the winter when the sun is lower. Sizing windows is also important. (He is surprised by how many new houses are still built facing the road instead of the sun.)

Unity provided them with 9-inch walls that come with windows and doors built in and densely packed with cellulose insulation. (This is better than having the cellulose blown in later because it avoids the problem of settling.) The interior wall with the insulation is never meant to be broken. (No hammering or drilling.) The panels are built in a facility that is climate controlled so materials are not exposed to the elements, don't get wet. Machines are computerized, so wood is measured and cut in a such a way as to minimize waste. Only a small pile of lumbers is left at the end of building a house. The interior wall has a cavity through which the mechanicals are run. Fabrics used in the house are designed to allow moisture, but not air, to flow out. Gaskets come

built into joints. When the blower test was done on their house (to test tightness or lack of drafts) the reading was very high.

Because the house is so tight, the house has an air-exchange unit to bring in fresh air and expel old air. The system also dehumidifies the house. Vents for air exchange are in almost every room. That means no separate vents for bathrooms or the kitchen; Brian was concerned about that but it has been working fine. The air-exchange system also enhances efficiency as the warm air leaving the house in winter warms the cool air coming in and vice versa in summer.

Triple-paned windows were a major expense. They are Euro style, tilt-turn. They can either open three inches at the top or be pulled out like doors. They come from a company in Wasco, Wisconsin, that sources the hardware from Europe. All the windows and doors in the house have many latching points that create air-tight seals when closed. The house is very quiet, well barriered against sounds outside.

The house is heated and cooled with a combination of two mini-splits and a wood stove that has its own fresh-air intake vent. In the summer they find that the efficiency of the house means they don't have to turn on the mini-splits for air conditioning too often. In other words, once they run the a-c for several hours, the house hangs on to that coolness for a long time afterwards. They have a hybrid hot water system (a downside is that the heat pump is noisy). They have an induction stove by Bosch. They didn't want to vent the drier so they have a condensing drier that takes the water out by condensation action. This kind of drier is popular in Europe and useful in apartments or buildings with limited venting options. The drier releases heat into the room and humidity but the air circulation system handles it.

They have cork floors, which are sustainable because they are made from bark that is taken from trees in such a way that the trees can regrow the bark. The cork is quiet, warm and cushiony. In some rooms they also used Marmoleum flooring — the brand name of a sustainable kind of linoleum — which they bought from the Floor Store in West Stockbridge.

Hinda Bodinger/Egremont plastic-reducing September: A movement in Australia had proposed a global plastic-free July initiative and as part of that Hinda in July started a Facebook page "Plastic-Free 413" where people have been sharing tips and enthusiasm. Hinda, for instance, is now using an old-fashioned refillable fountain pen instead of throwaway plastic pens. Hinda approached Guido's supermarket in Great Barrington about her idea of a plastic-lowering town initiative and they gave her a box of gear (water bottles, netted produce bags, etc.) to use in a possible raffle. The contents of the box are about \$125. She also brought books on generating less waste that included instructions on how to make your own soap, shampoo and dish liquid. She was hoping the Green Committee would support a similar awareness effort for the town in September. Members offered support and decided that the next meeting will be devoted to working on the specifics.

The next meeting was set for Monday, August 12, at 4pm. The meeting was adjourned at 5:35.

Submitted by Corinna Barnard